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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/967,268	09/28/2001	E. David Neufeld	COMP:0222	5215

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02/08/2005

Intellectual Property Administration
Legal Dept., M/S 35
P.O. Box 272400
Ft. Collins, CO 80527-2400

EXAMINER

NALVEN, ANDREW L

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/967,268

Applicant(s)

NEUFELD, E. DAVID

Examiner

Andrew L Nalven

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/17/2002</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-37 are pending.

Drawings

2. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The terms "more permanently" and "semi-permanently" in claims 1 and 6 are relative terms that render the claims indefinite. The terms "more permanently" and "semi-permanently" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-16 and 34-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Nevis et al US Patent No. 6,581,159. Nevis discloses a secure method of updating a BIOS by using a simple authenticated external module.

7. With regards to claims 1 and 9, Nevis teaches temporarily loading the boot block program into a first memory (Nevis, column 5 lines 4-7, random access memory), verifying the boot block program in the first memory (Nevis, column 5 lines 11-22, verifying hashes), and if verified, more permanently loading the boot block program into a second memory (Nevis, column 5 lines 24-30, install update).

8. With regards to claims 2, 14, Nevis teaches the act of temporarily loading comprises loading the boot block program into a random access memory (Nevis, column 5 lines 4-7, random access memory).

9. With regards to claims 3, 15, Nevis teaches the act of temporarily loading comprises loading the boot block program into volatile memory (Nevis, column 5 lines 4-7, random access memory).

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10. With regards to claim 4, Nevis teaches the act of verifying comprising authenticating the boot block program (Nevis, column 5 lines 11-22, verifying hashes).
11. With regards to claim 5, Nevis teaches the act of verifying comprising determining whether the boot block program is operable (Nevis, column 5 lines 11-22, verifying hashes).
12. With regards to claim 6 (as best understood), Nevis teaches the act of more permanently loading comprising the act of semi-permanently loading the boot block program into the second memory (Nevis, column 5 lines 24-30, install update, Figure 1).
13. With regards to claims 7, 11, Nevis teaches the act of more permanently loading comprises the act of loading the boot block program into read only memory (Nevis, column 3 lines 65 – column 4 line 5).
14. With regards to claims 8, 12-13, and 35, Nevis teaches the act of more permanently loading comprises the act of flashing the boot block into flash memory (Nevis, column 3 lines 65 – column 4 line 5).
15. With regards to claim 10, Nevis teaches a host computer (Nevis, Figure 2 “Firmware”), an appliance server coupled to the host computer where the appliance server has a storage memory and an execution memory (Nevis, Figure 2 “User Mode”), a control operably coupled to the appliance server and to the storage memory to control storage of programs into the storage memory (Nevis, Figure 2, Item 260, Transfer control to firmware), the applicant server being adapted to signal the control to permit the appliance server to storage a program in the storage memory (Nevis, Figure 2 Item 260), and a security device operably coupled to the control, the security device being

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adapted to signal the control to permit the host computer to store a program in the storage memory (Nevis, Figure 2 Item 270).

16. With regards to claim 16, Nevis teaches the security device being a switch (Nevis, column 5 lines 15-30, installs if hash values are correct).

17. With regards to claim 34, Nevis teaches all that is described above and further teaches the loading of the program over a network connection (Nevis, column 3 lines 51-58, Internet).

18. Claims 17-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Spiegel et al US Patent No. 6,711,675.

19. With regards to claims 17, Spiegel teaches verifying a program of an applicant server (Spiegel, column 4 lines 38-39) and if not verified, signaling a host computer to load a replacement program into the appliance server (Spiegel, column 4 lines 40-43).

20. With regards to claim 18, Spiegel teaches verifying comprising authenticating the program (Spiegel, column 4 lines 38-39).

21. With regards to claim 19, Spiegel teaches verifying comprising the act of determining whether the program is operable (Spiegel, column 4 lines 38-39).

22. With regards to claim 20, Spiegel teaches act of signaling comprising enabling a security switch (Spiegel, column 4 lines 38-46).

23. With regards to claim 21, Spiegel teaches determining whether a security switch has enabled the host computer to load the replacement program into the applicant server (Spiegel, column 4 lines 42-43).

24. With regards to claim 22, Spiegel teaches the program comprising a boot block program (Spiegel, column 4 lines 38-46, bios).

25. With regards to claim 23, Spiegel teaches the program comprising firmware (Spiegel, column 2 lines 22-36).

Claim Rejections - 35 USC § 103

26. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

27. Claims 24-31 are rejected under 35 U.S.C. 102(e) as being unpatentable over Nevis et al US Patent No. 6,581,159 in view of Spiegel et al US Patent No. 6,711,675.

28. With regards to claim 24, Nevis teaches everything described above, but fails to teach the reloading of the first program from the execution memory into the storage memory if the second program is not verified. Spiegel teaches the reloading of the first

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program from the execution memory into the storage memory if the second program is not verified (Spiegel, column 4 lines 40-43, backup bios startup block). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Spiegel's method of responding to failed authentication with Spiegel's method of updating a BIOS because it offers the advantage of allowing reprogramming if tampering is detected (Spiegel, column 1 lines 34-55).

29. With regards to claims 25-26, Nevis as modified teaches the execution memory comprising random access memory (Nevis, column 5 lines 4-7, random access memory).

30. With regards to claim 27, Nevis as modified teaches storage memory comprising read only memory (Nevis, column 3 lines 65 – column 4 line 5).

31. With regards to claims 28-29, Nevis as modified teaches storage memory comprising non-volatile memory (Nevis, column 3 lines 65 – column 4 line 5, flash memory).

32. With regards to claim 30, Nevis as modified teaches verifying comprising the act of authenticating the second program (Spiegel, column 4 lines 38-39).

33. With regards to claim 31, Nevis as modified teaches the verifying of whether the second program is operable (Spiegel, column 4 lines 41-43, validate backup bios).

34. Claims 36-37 are rejected under 35 U.S.C. 102(e) as being unpatentable over Nevis et al US Patent No. 6,581,159 in view of Holtey US Patent No. 5,491,827.

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35. With regards to claim 36, Nevis fails to teach the authenticating of a user directing the loading of the program. Holtey teaches the authenticating of a user directing the loading of the program (Holtey, column 6 lines 1-20). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Holtey's authentication mechanism with Nevis's BIOS update system because it offers the advantage of helping protect configuration information used for power-up or startup of a system (Holtey, column 3 lines 1-14).

36. With regards to claim 37, Nevis as modified teaches continuing to load comprising re-authenticating the user (Holtey, column 6 line 62 – column 7 line 6).


Conclusion


37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L Nalven whose telephone number is 571 272 3839. The examiner can normally be reached on Monday - Thursday 8-6, Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on 571 272 3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Nalven



GREGORY MORSE
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